REMARKS

Claims 1-7 are all of the claims pending in this application and stand rejected.

The Examiner's statement that claims 3, 6 and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, ¶ 2, and, if applicable, to include all of the limitations of the base claim and any intervening claims, is gratefully acknowledged.

Claims 1, 2, 4, 6 and 7 are amended herein to clarify the depiction of structural formulae, and this amendment is not made for reasons related to patentability.

Claim 7 is further amended herein to clarify antecedent basis, and this amendment is also not made for reasons related to patentability.

Care has been taken not to introduce any new matter and entry of the amendments is requested.

Review and reconsideration of the Office Action of October 16, 2003 is respectfully requested in view of the above amendments and the following remarks. The paragraph numbering of the Office Action is adopted.

Claim Rejections under 35 U.S.C. § 112, ¶ 2

At paragraph 2, claims 1-7 are rejected as being allegedly indefinite on the grounds that the representation of the claimed macrocyclic ketone compound is non-conventional. The Examiner appears to consider that the structure representation is unclear

with respect to which brackets correspond to x and which correspond to y, and further considers the representation to be unclear as to the placement of the alkyl or alkylidene substituent with respect to the carbonyl group.

Applicant respectfully asserts that the rejection is rendered moot by the amendments to claims 1, 2, 4, 6 and 7 herein.

The macrocyclic ketone structures depicted in the claims as amended herein clearly indicate the intended meaning of "x" and "y". With respect to the placement of the alkyl or alkylidene substituent, Applicant respectfully asserts that the claims, as amended, clearly identify the possible position of the alkyl or alkylidene substituent with respect to the carbonyl group by specifically recitating the permissible values of the indices x and y.

Thus, Applicant asserts that claims 1-7 as amended herein are not indefinite and respectfully requests that the rejection of claims 1-7 under 35 U.S.C. § 112, ¶ 2, be withdrawn.

At paragraph 3, claim 7 is rejected as being allegedly indefinite for lacking proper antecedent basis for "the keto function."

Applicant asserts that this rejection is rendered moot by the amendment to claim 7 herein, which provides the required antecedent basis.

Thus, Applicant asserts that claim 7 as amended herein is not indefinite and respectfully requests that the rejection of claim 7 under 35 U.S.C. § 112, ¶ 2, be withdrawn.

Claim Rejections under 35 U.S.C. § 102(b)

At paragraphs 4 and 5, claims 1, 2, 4 and 5 are rejected as being allegedly anticipated by DE 2934683 (abstract) to Bauer. It appears to be the Examiner's position that the compound "3-Me-cyclohexadecen-5-one-1" disclosed in Bauer falls within the scope of claim 1.

Applicant respectfully traverses the rejection.

Applicant asserts that the compound cited by the Examiner as being taught by Bauer (3-methyl-cyclohexadecen-5-one-1) does not fall within the scope of the present claim 1 for at least two reasons. First, Applicant notes that the methyl group at the 3-position is not sufficiently spaced from the carbonyl (at the 1-position) because the structure of Bauer lacks the intervening methylene carbons, specified by x and y in claim 1. Second, Applicant notes that the double bond at the 5-position of the compound taught by Bauer is also too close to the carbonyl for the same reason.

Therefore, Applicant asserts that claims 1, 2, 4 and 5 are not anticipated by Bauer, and respectfully requests that the rejection under 35 U.S.C. § 102(b) be withdrawn.

Claim Rejections under 35 U.S.C. §103(a)

At paragraphs 6-8, claims 1, 2, 4 and 5 are rejected as being allegedly unpatentable for obviousness in view of U.S. Patent No. 3,935,270 (Calderon). It appears to be the Examiner's position that Calderon teaches compounds of the present invention except for the alkyl substituent, and that these compounds are taught as perfume bases having a muscone odor. According to the Examiner, one of ordinary skill would have been motivated to add an alkyl substituent to the compounds of Calderon with the expectation that compounds similar in structure would have similar properties.

Applicant respectfully traverses the rejection.

As a preliminary matter, Applicant notes that one of ordinary skill in the perfume arts would have recognized, at the time of filing the present application, that the term "musk odor" only very broadly characterizes a major fragrance category. Within the category "musk" the art, of necessity, distinguishes a large number of musk-odor types. When discussing musk-odors, not only is the primary musk-odor to be considered, but the secondary aspects, must also be considered. For example, musk-odor types are well-known to be broken down in the art into such primary/secondary categories as musk/woody, musk/animalic, musk/sweet, musk/balsamic, and musk/floral. To further emphasize the complexity of the musk-odors, it is well-known in the art that the secondary aspects may be further broken down: musk/woody may be further characterized as

sandalwood, cedarwood, and methyl; musk/floral may be further characterized as rose, muguet or jasmine; and musk/balsamic may be further characterized as resins or balsam, to name just a few. Thus, the perfume notes exhibited by compounds possessing a musk-odor are known to be complex.

Applicant asserts that neither Cameron, nor any prior art, has disclosed or rendered obvious the possession of a muscone note by the compounds of the present invention.

Applicant first notes that Cameron does not teach or suggest that the 16-member alicyclic ketones (8-cyclohexadecene-1-one and cyclohexadecanone) have a muscone odor. Applicant respectfully draw the Examiner's attention to the fact that the passage cited in the Office Action (col. 1, lines 15-24) relates to other prior art macrocyclic ketones and not to any having a 16-carbon ring structure. In addition, the specification at page 3, lines 10-15, teaches that the cited compounds (8-cyclohexadecene-1-one and cyclohexadecanone) "do not smell muscone-like." Applicant asserts that, in the absence of any teaching in Cameron that the cited compounds possess a muscone note, one of ordinary skill would not have been motivated to modify the cited compounds (8-cyclohexadecene-1-one and cyclohexadecanone) by adding an alkyl substituent because there would have been no reasonable expectation that the resulting compound would have a muscone odor. In the absence of either a motivation to modify the teaching of Cameron, or a reasonable expectation of success in doing so, Applicant asserts that

Cameron cannot render the claimed compounds obvious.

Applicant further notes that that "[i]f the prior art of record fails to disclose or render obvious a method for making a claimed compound, at the time the invention was made, it may not legally be concluded that the compound itself is in the possession of the public". MPEP 2144.09, *In Re Hoeksema*, 399 F.2d 269, 274-75, 158 USPQ 597, 601 (CCPA 1968).

Applicant asserts that Calderon fails to teach a method for making the instantly claimed compounds, because the method of Calderon cannot produce correctly substituted compounds of the instant claims. Calderon teaches a method of producing alicyclic ketones containing 16 ring carbons from two 8-carbon precursors such as cyclooctene (see particularly Examples I and II). In the presence of catalyst, 1,9 cyclohexadecadiene is formed from cyclooctene. One unsaturated double bond is then converted to a carbonyl group to yield, for example, Δ8-cyclohexadecene-1-one (col. 11, line 35). Applicants assert that there are at least two reasons why the method of Cameron could not be adapted to produce the instantly claimed compounds.

First, the use of cyclooctene having an alkyl substituent would result in a 16 carbon ring structure having two alkyl substituents, which would fall outside of the scope of claim 1.

Second, in order to position the alkyl substituent according to claim 1, the alkyl substituent would have to be initially adjacent to the cyclooctene double bond. One of ordinary skill would expect that a substituent at this position

would interfere with ring-opening mechanism taught by Cameron at col. 2, lines 33-38.

Thus, the method of Cameron is not suitable for synthesis of the presently claimed compounds, and one of ordinary skill would not have been motivated to attempt to produce the compounds of the instant claims according to the method of Calderon, nor would he have had a reasonable expectation of success in doing so.

The Examiner appears to base a *prima facie* case of obviousness upon presumption of similar properties due to alleged structural similarity. Applicant respectfully disagrees in view of the well-known unpredictability of the perfume arts, and the complexity of "musk-odor" notes described above, whereby one of ordinary skill would not have been able to predict the sensorial effect of even minor changes in chemical structure. One of ordinary skill would simply have no reasonable expectation that the addition of an alkyl substituent would not substantially alter perfume properties. Where there is no reasonable expectation of similar properties in structurally similar compounds, any presumption of obviousness is overcome. *In re May*, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978) and MPEP 2144.09.

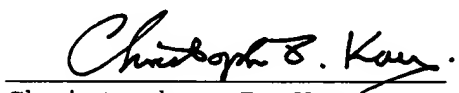
In the alternative, even were a *prima facie* case of obviousness established, Applicants assert that the presently claimed compounds possess superior and unexpected properties in the form of increased substantivity (see p.21, lines 26-32, of

the specification) sufficient to rebut such a *prima facie* case. MPEP 2144.09. The increased absorbtive power and increased adhesion of the fragrance to fibers is a commercially valuable property and a results-effective variable not recognized by Calderon.

Applicants therefore assert that a *prima facie* case of obviousness has not been established, and, in the alternative, that any such *prima facie* case would be rebutted by the superior and unexpected properties possessed by the claimed compounds. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) over Calderon be withdrawn.

As there are no remaining rejections or objections, Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If the Examiner considers that there are any remaining issues that may be addressed by telephone, the Examiner is requested to contact the undersigned at the number below.

Respectfully submitted,



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